Tuberculosis Control and Prevention

REPORT OF THE

VIRGINIA ADVISORY LEGISLATIVE COUNCIL

TO THE

GOVERNOR

AND THE

GENERAL ASSEMBLY OF VIRGINIA

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Tuberculosis Control and Prevention

A REPORT OF THE VIRGINIA ADVISORY LEGISLATIVE COUNCIL

RICHMOND, VIRGINIA, *December 15, 1945.*

To:

HONORABLE COLGATE W. DARDEN, JR., *Governor of Virginia*

AND

The General Assembly of Virginia:

The General Assembly at the extra session in 1945 directed the Virginia Advisory Legislative Council to make a study and report upon the problem of the prevention and control of tuberculosis in Virginia.

House Joint Resolution No. 37 is as follows:

HOUSE JOINT RESOLUTION No. 37

Directing the Virginia Advisory Legislative Council to make a study and report on the problem of the prevention and control of tuberculosis in Virginia.

Whereas, the prevalence of tuberculosis in the State of Virginia, due in part at least to the failure of existing facilities and methods of prevention and control, makes it advisable that the whole problem be given further study before any substantial changes are made in such facilities and methods; Now, Therefore,

Be it resolved by the House of Delegates of Virginia, the Senate concurring, as follows:

Section 1. The Virginia Advisory Legislative Council is authorized and directed to make a thorough investigation and study of the problem of the prevention and control of tuberculosis in the State of Virginia, and the contribution which the State and its political subdivisions should make to the solution of this problem, giving particular attention to the adequacy of existing law with respect to isolation and quarantine. In its study the Council shall avail itself of the assistance of the Department of Health, and of any Federal, State or local agency or private organization concerned with the problem.

Section 2. The Council shall submit to the Governor and the General Assembly at least sixty days prior to the next regular

Acknowledged

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session of the General Assembly a report of its findings and recommendations, together with any proposed legislation necessary to carry such recommendations into effect.

The Council referred this study to E. O. McCue, Jr., Charlottesville, Member, House of Delegates, as Chairman of the Committee to make the preliminary study and report. The following served on the Committee with the Chairman: Dr. I. C. Riggin, State Health Commissioner; Frank C. Hanrahan, County Manager, Arlington County, Arlington; Dr. Frank B. Stafford, Superintendent and Medical Director, Blue Ridge Sanatorium, Charlottesville; and Thomas C. Boushall, President, Morris Plan Bank, Richmond.

The Committee organized and appointed Cassius M. Chichester and John B. Boatwright, Jr., as Secretary and Recording Secretary, respectively to the Committee.

The Committee gathered and studied all available data from the files of the Health Department and other sources, made personal examination of certain of the facilities at the tuberculosis sanatoria, studied the laws of this and other states and practices thereunder and after careful consideration of same, reported to the Council.

The Council studied the report and accompanying data and now makes its report.

The tuberculosis picture in the State is as follows.

In 1915, which was the first year the vital statistics law in Virginia was in operation requiring the physicians to report births and deaths, it was found that 4,003 people (white, 1,765 and colored, 2,238) had died of tuberculosis. No doubt there were many more deaths from tuberculosis not reported, because many of the physicians were indifferent and careless and did not understand their responsibilities in the matter. Also many mistakes in diagnosis must have been made, when we consider the poor facilities available for this purpose at that time. In contrast to the high death rate in 1915, we find last year (1944) the Bureau of Vital Statistics of Virginia reports 1,287 deaths from all forms of tuberculosis in Virginia, both white and colored. When this is broken down into the two races, it is revealed that 625 deaths occurred in white and 664 in colored. This compared to 1943 shows reduction of 110 deaths, or 7.8 per cent, and is 30 less deaths in the white and 80 less in the colored.

It is well to compare Virginia's death rate from tuberculosis with that of other states in the Union. Miss Mary Dempsey, Statistician for the National Tuberculosis Association, has collected reports from Health Departments in the 48 states and District of Columbia for the 1943 death rate from tuberculosis for the continental United States (the death rate for the last year (1944) by states is not yet available), and it was found to be 41.9 per 100,000 population. This is in contrast to 43.1 for the year 1942. Several states have been selected from Miss Dempsey's publication and compiled in table 1 listed below. In addition to showing the total number of deaths and the rate per 100,000 population for the states, there is included the total number of new

cases reported and the ratio existing between these and the deaths which occurred. For many years it has been felt that there should be a given number of new cases of tuberculosis discovered and reported on a ratio basis to the number of deaths. It was not until recently that this ratio was fixed by the American Public Health Association at two. Last year this same Association raised the standard to three new cases per annual death.

TABLE 1

NEW CASES REPORTED, DEATHS AND DEATH RATES FROM TUBERCULOSIS, BY STATES—1943

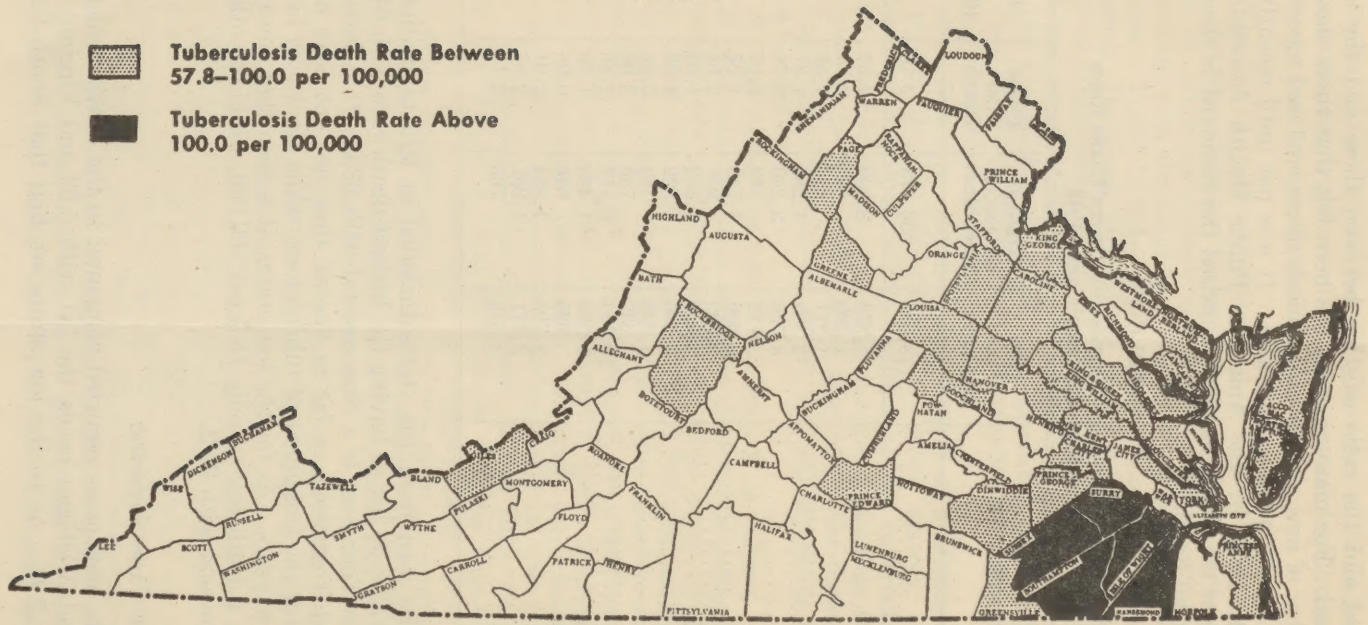
STATE	New Cases Reported	Number of Deaths (Recorded)	Cases Per Death	Rate Per 100,000
United States	118,042	56,178	2.10	41.9
California	7,879	3,809	2.07	45.0
Connecticut	1,280	599	2.14	33.7
Florida	1,211	834	1.45	35.2
Georgia	2,409	1,285	1.87	39.8
Illinois	8,756	3,240	2.70	42.1
Iowa	729	380	1.92	16.4
Kentucky	2,356	1,748	1.35	64.0
Maryland	3,522	1,204	2.93	57.6
Massachusetts	2,960	1,802	1.64	42.3
Michigan	6,546	1,802	3.63	33.2
Minnesota	1,928	753	2.56	29.2
Mississippi	1,637	786	2.08	35.2
New York	14,744	6,417	2.30	49.9
North Carolina	1,583	1,444	1.10	39.7
South Carolina	635	645	0.98	33.1
Tennessee	3,793	1,883	2.01	63.6
Virginia	3,771	1,397	2.97	45.4
West Virginia	1,643	765	2.15	43.6

It will be seen from the states included in this tabulation that Kentucky heads the list as having the highest death rate with 64.0 per 100,000 while Tennessee is a close second with 63.6. It is interesting to know that Tennessee, as far as known, does not yet have a State Sanatorium for the treatment of tuberculosis, while Kentucky has only had one a few years. As for the low states, it is seen that Iowa heads the list with a death rate of only 16.4 per 100,000, while the other low state is Minnesota with 29.2.

Rates of New Cases Reported:

As to the new cases reported compared to the deaths which took place, we find Michigan heads the list with 3.63 and Virginia stands second with 2.97. As to the low states we find that South Carolina

MAP 1



Source: Virginia Bureau of Vital Statistics

VIRGINIA COUNTIES HAVING AN AVERAGE ANNUAL TUBERCULOSIS DEATH RATE HIGHER THAN THE STATE RATE OF 57.8 PER 100,000—1939-1943

was at the bottom of the list with 0.98 cases, next is North Carolina with 1.10; Kentucky with 1.35 and Florida with 1.46. This comparison shows that Virginia is well out in front in diagnosis and case finding, and that recommendation speaks well for the results which have been accomplished by the State Department of Health in its industrial surveys and tuberculosis clinic work in general throughout the State. With 2.97 cases reported, Virginia's rate is almost up to that recommended by the American Public Health Association.

The over-all picture as regards incidence of tuberculosis has been shown. Now the picture in its component parts will be given.

Population Groups (Race)—The census figures for 1940 show a white population of 2,016,324 and a Negro population of 661,449 in Virginia. Total deaths for white were 626 and for colored, 661, or rates of 29.5, white, 97.7, Negro, for the year 1944. The high death rate in the Negro race is a dominant factor in the tuberculosis program and must be given careful and serious consideration. The interrelation of races is such that a high death rate in either race reacts unfavorably upon the other. The changing economic status of the Negro that has promoted him from domestic and agrarian to public work and industry removes a possible focus of infection from white homes, but in no sense benefits the Negro race.

Map 1 shows the incidence of the disease, by counties, among the Negro race.

TUBERCULOSIS DEATHS, FIVE-YEAR PERIOD, BY RACE

	1940		1941		1942		1943		1944	
	No.	Rates	No.	Rates	No.	Rates	No.	Rates	No.	Rates
White.....	732	36.2	746	35.9	743	34.9	686	31.4	626	29.5
Colored.....	828	124.6	892	130.1	849	125.1	760	110.8	661	97.7

Age Distribution.—A study of Table 2 indicates marked differences between the white and Negro races. In the white race, there is an increase after the age of 60, and in Negroes, the rate abruptly rises in the age group 15-19 and continues high throughout life. This presents a definite problem in control of a group for which no adequate provisions of hospitalization or isolation are available outside the home. For the colored group where the rate is highest in the most productive years of life and frequently it is the wage earner affected and presents a more serious family problem both socially, economically and medically. (See attached Table 2.)

TABLE 2

DEATHS FROM PULMONARY TUBERCULOSIS—1943.

AGE	WHITE			COLORED		
	Population	Deaths	Deaths Per 100,000 Population	Population	Deaths	Deaths Per 100,000 Population
1–4	194,273	4	2.1	67,576	9	13.3
5–9	197,535	0	0.0	72,035	3	4.2
10–14	212,813	0	0.0	76,838	21	27.3
15–19	223,749	17	7.6	77,523	76	98.0
20–24	206,288	40	19.4	66,203	97	146.5
25–29	189,885	51	26.9	56,255	78	138.7
30–34	170,242	57	33.5	45,279	84	185.5
35–39	150,577	49	32.5	43,908	60	136.6
40–44	132,055	50	37.9	39,449	59	149.6
45–49	117,860	44	37.3	35,332	48	135.9
50–54	102,582	53	51.7	30,872	39	126.3
55–59	84,019	42	50.0	22,296	39	174.9
60–64	72,004	51	70.8	18,523	16	86.4
65–69	57,827	53	91.7	16,121	18	111.7
70–74	37,105	44	118.6	9,604	11	114.5
75 and over	35,980	45	125.1	9,604	10	104.1
Unknown		1	.....	.....	1	.....
Total	2,184,774	601	27.5	687,418	669	97.3

Having seen the problem both in its entirety and in its phases the question arises as to the present facilities offered by the State to combat this menace.

The total number of beds in the State Sanatoria at the present time are as follows:

SANATORIUM	NUMBER BEDS		
	Infirmary	Pavilion	Total
Catawba	134	266	400
Blue Ridge	137	233	370
Piedmont	172	97	269
Total	443	596	1,039

Tabel 3 shows the distribution in the fiscal year 1945 of the patients at the sanatoria.

TABLE 3

DISTRIBUTION OF SANATORIA PATIENTS BY COUNTIES

July 1, 1944, to June 30, 1945

COUNTIES	Catawba	Blue Ridge	Piedmont	Total
Accomack	2	9	6	17
Albemarle	1	19	6	26
Alleghany	10	2	2	14
Amelia	1	0	1	2
Amherst	1	0	0	1
Appomattox	0	1	0	1
Arlington	10	32	10	52
Augusta	2	27	2	31
Bath	2	2	1	5
Bedford	3	1	3	7
Bland	1	0	0	1
Botetourt	6	0	0	6
Brunswick	0	0	10	10
Buchanan	8	4	0	12
Buckingham	0	2	3	5
Campbell	8	9	5	22
Caroline	0	1	5	6
Carroll	6	0	0	6
Charles City	0	0	1	1
Charlotte	2	1	2	5
Chesterfield	2	5	3	10
Clarke	0	1	0	1
Craig	0	0	0	0
Culpeper	0	3	3	6
Cumberland	0	0	1	1
Dickinson	9	1	0	10
Dinwiddie	3	9	9	21
Elizabeth City	2	12	3	17
Essex	0	1	0	1
Fairfax	1	12	1	14
Fauquier	0	6	1	7
Floyd	2	0	0	2
Fluvanna	0	2	2	4
Franklin	1	1	1	3
Frederick	1	7	2	10
Giles	4	5	0	9
Gloucester	0	1	1	2
Goochland	0	2	1	3
Grayson	5	0	0	5
Greene	0	1	0	1
Greensville	1	2	4	7
Halifax	7	3	8	18
Hanover	2	3	4	9
Henrico	5	29	3	37
Henry	17	0	5	22
Highland	0	1	0	1
Isle of Wight	2	0	1	3
James City	1	3	1	5
King and Queen	0	0	1	1
King George	0	0	0	0
King William	0	0	2	2
Lancaster	0	0	3	3
Lee	11	1	0	12

TABLE 3—CONTINUED

COUNTIES	Catawba	Blue Ridge	Piedmont	Total
Loudoun	0	3	0	3
Louisa	1	3	3	7
Lunenburg	1	1	1	3
Madison	0	3	1	4
Mathews	0	2	0	2
Mecklenburg	3	4	6	13
Middlesex	0	1	2	3
Montgomery	17	2	0	19
Nansemond	2	4	9	15
Nelson	0	2	0	2
New Kent	0	1	0	1
Norfolk	17	52	16	85
Northampton	2	0	11	13
Northumberland	0	1	1	2
Nottoway	0	1	4	5
Orange	0	1	1	2
Page	1	5	0	6
Patrick	2	0	0	2
Pittsylvania	4	12	11	27
Powhatan	0	0	0	0
Prince Edward	2	1	4	7
Prince George	3	7	5	15
Prince William	1	0	0	1
Princess Anne	1	3	0	4
Pulaski	7	1	0	8
Rappahannock	0	1	0	1
Richmond	0	2	0	2
Roanoke	31	0	0	31
Rockbridge	8	2	0	10
Rockingham	3	14	2	19
Russell	7	2	0	9
Scott	14	0	0	14
Shenandoah	1	4	1	6
Smyth	10	2	2	14
Southampton	0	5	2	7
Spotsylvania	0	11	3	14
Stafford	0	6	2	8
Surry	0	0	1	1
Sussex	0	1	7	8
Tazewell	20	1	3	24
Warren	1	7	0	8
Warwick	2	19	12	33
Washington	12	0	0	12
Westmoreland	0	3	1	4
Wise	28	0	1	29
Wythe	6	1	1	8
York	0	1	2	3
	346	413	232	991

In addition there are 585 beds at the Municipal Sanatoria which are as follows: Pine Camp Hospital, Richmond; Granby Sanatorium, Norfolk; Hilltop Sanatorium, Danville; and Roanoke City Sanatorium, Roanoke.

Of the total of 1,624 beds, 1,039 are owned and operated by the State, the remaining 585 being owned and operated by the municipalities as listed above. Of these beds 1,163 are for white and 461 for colored. It will be seen from these figures that Virginia has only 1.25 beds, State and Municipal, for every annual death as compared to the quota recommended by the National Tuberculosis Association as referred to above, that is, a ratio of one to two or three. When these figures are broken down between the two races there is for white 1.8 beds per annual death, while for colored there is only 0.7 of a bed available.

The table showing the distribution of beds in the State Sanatoria reveals that Catawba and Blue Ridge have only about one-third of their beds located on the Infirmary and the remaining two-thirds on pavilions, while Piedmont has just the reverse.

Map 2 shows the distribution of sanatoria and pneumothorax stations.

Central Register.—Since 1914, a central register has been maintained where all positive cases reported, as required by Section 1515 of the Code, by private physicians, clinics, sanatoria, Selective Service and Veterans' Facilities are recorded. The recorded cases, as of January 1, 1945, were 38,534; in 1920, there were 18,489 on the register.

Clinic Service.—Two mobile x-ray units furnished diagnostic and consultation service throughout the rural areas of Virginia. Early in 1942, a staff clinician entering the army created a vacancy which has not been filled. However, the clinic has continued to function with the exception of discontinuing the physical examinations. General practitioners in many small and rural areas are dependent on this service for x-ray examinations of their patients because of the lack of x-ray facilities and trained physicians to operate these facilities.

Permanent x-ray clinics have been established in Martinsville, Hampton and in the counties of Fairfax, Prince William and Nansemond during 1945.

Special Study.—In cooperation with the Bureau of Maternal and Child Health, a tuberculosis study has been in operation for the past five years on prenatal and postnatal cases. These are unselected cases attending the State Maternal and Child Health Clinics who are brought into the mobile x-ray clinics. Over a period of five years, 1,110 women have been x-rayed, 65 or 5.8 per cent having been found to have active tuberculosis. This is a high percentage to find in an unselected group.

Nursing Service.—The nursing service comprises a staff of eight nurses and one supervisor. These tuberculosis field nurses carry on an active case finding program among adult, adolescent and child contacts; home visits to establish tuberculosis control measures; organization and assistance in clinics; and follow-up of clinicians' and family physicians' recommendations in the forty-nine counties without local health departments. Due to war time shortages, there have been only

MAP 2

Source: State Health Department

VIRGINIA STATE AND MUNICIPAL FACILITIES FOR TREATING TUBERCULOSIS, OCTOBER 1945

five field nurses on duty. These five nurses made 612 visits to patients discharged from the sanatoria and a total of 5,262 home visits during 1945.

Collapse Therapy.—The collapse therapy program was inaugurated July 1, 1938. Forty-seven private practitioners were employed on a part-time basis to operate the pneumothorax stations established throughout the State. The majority of these stations are located in small hospitals where the necessary fluoroscopic and sterilizing equipment is available.

Major chest surgery is performed in the two State-owned hospitals and four other general hospitals. Only patients lacking necessary funds are eligible for treatment and chest surgery under this program.

Industrial and School Surveys—

Industry: These x-ray surveys are carried on jointly with the Bureau of Industrial Hygiene. The two 35MM. photo-fluorographic units have x-rayed a total of 253,408 workers as of August 1, 1945, the majority of these being employed in war work during the past four years. The following table of tuberculosis discovered indicates this is an important and essential piece of work. Few of these workers had any suspicion that they might have any pulmonary tuberculosis prior to survey.

Re-infection, Active	2,396
Re-infection, Healed	534
Suspicious	1,124

School Surveys.—The need for an inexpensive rapid method of x-raying large groups of college students, high school groups, school teachers, bus drivers, and school cafeteria workers has been met by plans worked out in cooperation with the Virginia Tuberculosis Association. The Association assumed the responsibility of arranging and holding the clinics, and the local health departments and the Tuberculosis Out-Patient Service provided the follow-up on all persons with positive and suspicious findings.

1944-1945

No. x-rayed	59,898
Re-infection Tuberculosis, Active	380
Re-infection Tuberculosis, Healed	1,123

Selective Service.—Since January, 1941, Selective Service rejectee tuberculosis reports from the Armed Forces Induction Stations are received almost daily. Those with positive disease are registered and the information is relayed to the local health departments for the necessary investigation and follow-up. Over the four-year period, 2,660 positive reports have been received from Selective Service.

Rehabilitation.—The rehabilitation of the tuberculous is an integral part of the treatment of tuberculosis and therefore a part of any control program. It is usually considered best for any ex-tubercular

to return to his former occupation providing it is not one of the so-called "dangerous trades". For those who cannot resume their former occupations, it becomes necessary to assist this person in planning for vocational training. These persons are referred to the Division of Rehabilitation of the State Board of Education for guidance and retraining.

Education.—An educational program serves to emphasize the necessity of early diagnosis and regular medical attention. The methods utilized for informing the public by instruction and propaganda include clinics, news articles, radio talks, lectures, moving pictures, special posters, spot maps and distribution of health literature.

The foregoing shows what is available mostly in the way of case finding in tuberculosis, if personnel and funds permit. What is actually available?

Next we turn to the hospitalization of cases and to a discussion of the limited facilities for caring for them in our State sanatoria which includes a comparison of these with sanatoria of other states. Seven sanatoria in other States, believed to be as good as any in this country, were sent inquiries to obtain this information.

Sanatorium Personnel:

The normal ratio of employees to patients in out of state sanatoria ranges from approximately one employee to every one and one-half to two and one-half patients. At Catawba and Blue Ridge Sanatorium the normal ratio has, in the past, been one employee to approximately two patients. At the present time the out of state sanatoria are maintaining approximately their usual normal ratio between their number of employees and patients. However, at Catawba and Blue Ridge there is now only one employee for every 2.5 to 3 patients.

In the out of state sanatoria the normal nurse-patient ratio is considerably lower than the normal nurse-patient ratio in the three Virginia State sanatoria. The normal ratio at Blue Ridge and Catawba Sanatorium has in the past averaged one nurse to every 4.8 patients, while at Piedmont the ratio has been one nurse to six patients. At the present time in the out of state sanatoria one nurse is taking care of from three to ten patients whereas in Virginia one nurse is taking care of approximately seven to eleven patients. This would certainly indicate that there is a very acute shortage of nursing personnel in our Virginia Sanatoria.

Staff Physicians:

In the out of state sanatoria in normal times, one physician has cared for from 46 to 104 patients, while in Virginia Sanatoria in normal times one physician has cared for from 53 to 66 patients. At present in the out of state sanatoria one physician cares for from 43 to 119 patients, whereas in Virginia one physician is caring for from 103 to 154 patients. These figures would certainly indicate an acute shortage of staff physicians, and an effort should be made to correct this. The

present number of physicians is inadequate to give proper service to such a large number of patients, particularly when so many of these patients are of the sicker type.

From what has been set out the following matters are apparent:

a. Tuberculosis can in time be eradicated.
b. Tuberculosis kills more people between the ages of 15 and 45 than any other disease.
c. Eradication of tuberculosis among the colored population is an urgent need.
d. More sanatoria are needed together with personnel; salaries sufficient to attract and hold such personnel must be paid.
e. A correlated attack on tuberculosis through case finding, sanatoria care and surgical procedure will in time repay the State many times over the initial outlay. One case taken in time can be cured at less than one-fifth the cost of caring for a terminal or hopeless case.

The conclusions and recommendations follow.

1. Piedmont Sanatorium should be expanded from its present capacity of 269 beds to approximately 500 beds; the additions should be of the infirmary type.

Piedmont Sanatorium is for Negro patients. The need for more beds to meet the incidence of the disease among the race has been shown. The increase from a capacity of 269 to approximately 500 beds will greatly aid in the control of the disease.

The new facilities should be of the infirmary type because the so-called pavilion facility is not suitable for complete bed care, discipline is more difficult, and because the infirmary facility can be used for all purposes whereas the pavilion type is suitable for only one type of case.

2. An additional sanatorium with a 500-bed capacity should be established for Negroes suffering from tuberculosis; this institution should be located in the area of highest incidence and will cost $2,000,000 at $4,000 per bed.

In order to meet the minimum of two beds for each death from tuberculosis among the Negro race (which has been shown to have the highest death rate) a new sanatorium should be provided. This should be located in the area of highest incidence. For the reasons heretofore set out the new facilities should be of the infirmary type.

3. Blue Ridge Sanatorium should be expanded from a capacity of 370 beds to 500 beds; the additional facilities should be of the infirmary type.

In order to bring the facilities for the white race to the necessary level the Blue Ridge Sanatorium should be expanded from a capacity

of 370 beds to 500 beds; this will bring the number of beds for the white race up to minimum requirements. For reasons previously set out the new facilities should be of the infirmary type.

4. The facilities of Catawba Sanatorium should be improved and modernized through the replacement of obsolete buildings.

Catawba Sanatorium which serves largely the western area of the State should be modernized and the facilities improved through the replacement of obsolete buildings. The present buildings in some cases are outmoded and beyond repair. This will lead to more efficient service. Catawba Sanatorium, just as Blue Ridge, draws from all over the State though more people in the western part of the State go there because it is closer home.

5. A 500-bed hospital should be established for the hospitalization of persons suffering from chronic diseases or illnesses; this institution should have appropriate facilities to house incorrigible patients of the two races and the two sexes; this will cost approximately $1,500,000 at $3,000 per bed.

One of the problems which taxes the sanatoria facilities is the care of persons suffering from chronic and incurable illnesses. This type of case needs mostly custodial care. Such patients occupy beds in the sanatoria or hospitals which could be used for patients with incipient disease. The care of chronically ill persons of this kind in institutions is less expensive than that of other types of cases often capable of being cured.

Another problem is the institutional care of incorrigible patients. They cannot and should not be housed with well behaved patients. In the past some have been cared for at the State Farm (for men), but there, they cannot obtain needed care. There is no place to house incorrigible female patients.

It is the recommendation of the Council that a 500-bed isolation hospital be provided with separate facilities for the chronically ill and the incorrigible. Such an institution should have proper quarters for the two groups referred to and also house separately the two races and sexes. This will take a load from the sanatoria and hospitals, lead to more efficient use of the sanatoria, and provide adequate care for the groups referred to at considerable saving.

6. Existing laws should be amended to provide for the compulsory isolation of persons suffering from tuberculosis.

The present statutes for the isolation of tubercular persons are inadequate. The Council recommends that they be amended to provide for such compulsory isolation for the very good reasons that such persons are a menace to the health of the general public, they endanger their own lives, and they can be treated and cured much less expensively in the early than in the late stages of the disease.

7. The surgical facilities in the sanatoria should be placed into operation again when conditions and personnel permit; these

facilities should be expanded by increasing the appropriation for indigent cases from $50,000 to $100,000.

In the last few years one of the most important advances in the cure of tuberculosis has been the use of surgical techniques involving collapse of the affected lung or, in severe cases, excision of a badly damaged lung. The benefits have been many; the length of stay in the institution is reduced, the patient is more quickly returned to health, and time and funds—both that of State personnel and revenues and that of the patient—are saved. The sanatoria in this State have adopted and made wide use of surgery in this field. An expansion of this program will greatly benefit the public and the State by making more efficient use of sanatoria and reducing ultimately, public outlays. The patients can also benefit very materially. To this end, the Council recommends that this program be expanded from an outlay of $50,000 to one of $100,000 per annum as soon as needed personnel and facilities can be obtained.

8. Sufficient funds should be appropriated to the Health Department so that it can appoint a Director of Tuberculosis Work who can devote his full time to complete coordination of the tuberculosis control program in the State.

The State Health Department has done well in coordinating the work of the sanatoria, field workers, local health departments and other persons and agencies in this field despite the lack of adequate funds and a shortage of personnel. It is the opinion of the Council that in order for the Department to do the best work it should be given the necessary funds to employ a full time director of tuberculosis control work with other necessary personnel. Such a director could give his full time to this work. The Department, if given the money, will do the work; it is the recommendation that the money be given.

CONCLUSION

The Council wishes to express its appreciation for the assistance rendered by the Virginia Tuberculosis Association, and the members of the Committee who so generously gave of their best to the preparation and formulation of this report. The Council is indebted to them for their most excellent services.

A bill is attached to effectuate the one recommendation requiring legislation.

Respectfully submitted,

EDWARD L. BREEDEN, JR., *Chairman*
EDWARD O. MCCUE, JR., *Vice-Chairman*
WILLIS E. COHOON
CHARLES R. FENWICK
GARLAND GRAY
E. GLENN JORDAN
E. BLACKBURN MOORE
JOHN B. SPIERS
ROBERT C. VADEN

A BILL

To amend and re-enact Section 1516 of the Code of Virginia, relating to control of tuberculosis.

Be it enacted by the General Assembly of Virginia:

1. That section fifteen hundred sixteen of the Code of Virginia be amended and re-enacted, as follows:

Section 1516. * *Unlawful for persons having tuberculosis to endanger health of others: how restrained.—It shall be unlawful for any* * person suffering from tuberculosis * *to* violate the laws prohibiting expectoration in public places and vehicles, or * *to* deliberately and continuously place the health of any person in danger of infection with such disease *. *Any person violating any of the provisions of this section shall be deemed guilty of a misdemeanor and punished accordingly.*

Any person violating the provisions of this section may, in lieu of prosecution hereunder, upon motion of any member of the board of health of any county or city *of* the Commonwealth, * be summoned to appear before * the circuit * or corporation court of *such* city or county to answer *such* charge, and if, after hearing, it be found that such person is guilty of the conduct charged and is a menace to the health of the public, or is unnecessarily exposing other persons to infection with tuberculosis, the court may order such person to be restrained and detained for a period not exceeding twelve months in some suitable place, or be required to give bond in a penalty to be determined by the court conditioned upon a cessation of the practices complained of for such period, not exceeding twelve months, as the court may determine. The court may at any time, for good cause shown, rescind or modify such order, or make such other disposition of *such* person as is authorized by existing laws.

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